U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

May 26, 2015

Congressional Committees

Defense Transportation: Air Force's Airlift Study Met Mandate Requirements

In January 2012, the Department of Defense (DOD) issued strategic guidance that called for recalibrating joint force capabilities and making selective additional joint force investments in order to succeed in 10 enumerated mission areas.[1] The guidance also noted that the balance between available resources and the nation's security needs has never been more delicate. DOD initiated a budget-reduction initiative in fiscal year 2013 to reduce the department's budget by $486.9 billion below its fiscal year 2012 level by fiscal year 2021. As part of that budget-reduction initiative, DOD planned to retire C-23 cargo planes, which are used by National Guard units both in their federal role as combat units and in their state role as first responders to natural disasters. The decision to retire these planes led to congressional committee interest in the adequacy of airlift to support military operations.

Section 112 of the National Defense Authorization Act (NDAA) for Fiscal Year 2012 required that the Secretary of the Air Force conduct a study to determine the number of fixed-wing (plane) and rotary-wing (helicopter) aircraft necessary to support the following four missions under Titles 10 and 32 of the U.S. Code—(1) homeland defense, (2) time-sensitive direct support, (3) disaster response, and (4) humanitarian assistance—at the following five levels of operational risk: low, medium, moderate, high, and very high.[2] Section 112 also required that the study be completed in consultation with the Secretary of the Army, the Director of the National Guard Bureau, each supported commander of a combatant command, and the Administrator of the Federal Emergency Management Agency (FEMA).[3] Additionally, the Secretary of the Air Force was to submit a report containing the study to the congressional defense committees. According to the Air Force, the Air Force tasked Air Mobility Command to perform the airlift study and tasked Headquarters, Air Force, Analyses, Assessments, and Lessons Learned (A9) with finalizing the subsequent report based on the study. The Air Force entered into a contract with RAND to conduct the airlift study.[4] RAND completed this classified

[1]Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (January 2012). The 10 enumerated mission areas are: (1) counter terrorism and irregular warfare; (2) deter and defeat aggression; (3) project power despite anti-access/area denial challenges; (4) counter weapons of mass destruction; (5) operate effectively in cyberspace and space; (6) maintain a safe, secure, and effective nuclear deterrent; (7) defend the homeland and provide support to civil authorities; (8) provide a stabilizing presence; (9) conduct stability and counterinsurgency operations; and (10) conduct humanitarian, disaster relief, and other operations.

[2]*See* Pub. L. No. 112-81, § 112(d) (2011).

[3]DOD's nine combatant commands are: (1) U.S. Africa Command, (2) U.S. Central Command, (3) U.S. European Command, (4) U.S. Northern Command, (5) U.S. Pacific Command, (6) U.S. Southern Command, (7) U.S. Special Operations Command, (8) U.S. Strategic Command, and (9) U.S. Transportation Command.

[4]RAND operates a federally funded research and development center that provides the Air Force with studies and analyses through a program called Project Air Force. Air Mobility Command, through the Project Air Force contract, funded RAND to conduct the NDAA for Fiscal Year 2012 Air Force Airlift Study.

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
26 MAY 2015		**00-00-2015 to 00-00-2015**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Defense Transportation: Air Force's Airlift Study Met Mandate Requirements	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Government Accountability Office,441 G Street NW,Washington,DC,20548**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**16**	

study in December 2012. The Air Force submitted its classified executive summary report, which included the RAND study, to the congressional defense committees in March 2013.

Section 112 also included a provision for GAO to conduct a sufficiency review of the study.[5] This report determines the extent to which the Air Force's airlift study conformed to generally accepted research standards and addressed the mandate.

To determine the extent to which the Air Force's airlift study conformed to generally accepted research standards, we identified applicable generally accepted research standards—on design, execution, and presentation—using relevant prior GAO reports, and criteria that define a sound and complete study. Two analysts and two social scientists: (1) independently reviewed the airlift study and plan to analyze the information against the identified generally accepted research standards, (2) determined whether the study conformed to the standards, and (3) reconciled the four analyses into one complete analysis. See enclosure I for an outline of the generally accepted research standards we used. We also met with the officials who conducted the study to discuss the research standards they had used as well as the study's design, execution, and presentation. To determine the extent to which the Air Force's airlift study addressed the mandate, we reviewed and analyzed the requirements for the study outlined in Section 112 of the NDAA for Fiscal Year 2012 and compared these requirements with the information contained in the Air Force study. Specifically, we conducted an analysis to determine whether the Air Force airlift study fully met, partially met, or did not meet the mandate's requirements. We also interviewed the officials who led the study from the Air Force, including the Air Mobility Command and RAND as well as officials identified to be the most knowledgeable from the Air Force, Army, National Guard Bureau, combatant commands, and FEMA, to determine whether they or their offices had been consulted during the completion of the study and what other observations, if any, they had about the study or conduct. See enclosure II for additional information about our scope and methodology.

We conducted this performance audit from June 2014 to May 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

We found that the Air Force airlift study conformed to generally accepted research standards and generally met the requirements of the mandate related to the study by fully addressing the three elements required. For instance, we found that the design standard was fulfilled because the airlift study had a plan that was methodical, and that presented the study's tasks, timelines, and deliverables. We also found that the assumptions and constraints of the plan were identified and deviations from the plan were mentioned, such as the rationale of selecting one domestic scenario to discuss two missions. Additionally, we found that the study fully addressed the requirements of the mandate in that it

- analyzed the four missions identified using four approved scenarios: two overseas scenarios for the time-sensitive, direct support mission; one domestic scenario for the

[5] *See* § 112(e).

homeland defense mission; and one additional domestic scenario for both the disaster response and humanitarian assistance missions;

- generated the requirements at five risk levels—very high, high, moderate, medium, and low—with each risk level identifying the likelihood of meeting airlift demand with a given deployed fleet size; and

- was conducted in consultation with representatives from the Army, the National Guard Bureau, the combatant commands, and FEMA, which we determined through reviewing the stakeholders' written comments on the report and interviewing officials.

While most of the stakeholders agreed with the study's conclusions, many of them did so with caveats. For instance, officials from the Army, U.S. European Command, and U.S. Transportation Command noted that although their respective organizations concurred with the airlift study overall, they questioned the wider utility of the study because it did not consider planning limitations such as multiple simultaneous contingencies, or take into consideration unavailable aircraft.

We are not making any recommendations in this report.

Airlift Study Conformed to Generally Accepted Research Standards and Met the Requirements of the Mandate

The Airlift Study Conformed to Generally Accepted Research Standards

The airlift study generally followed the research standards we derived from previous GAO work, other research literature, and DOD guidance.[6] We evaluated the airlift study against a checklist of these standards that measures the design, execution, and presentation of research studies.[7] We also conducted interviews with those officials from RAND, Air Mobility Command, and Air Force A9 who worked on the study to discuss the standards utilized in the study. Four independent analyses were completed and then reconciled to determine the extent to which the airlift study conformed to three overarching standards. Each of the three standards included components that determined whether the standard was met. In instances where evidence determined that components of a standard were not applicable, the standard was still determined to be met. For instance, while an official explained that the study did not include baseline data, a component of the execution standard, the data utilized for the analyses were approved and vetted. Table 1 provides a summary of the assessment of the airlift study against the generally accepted research standards.

[6]As is the case for most studies, there were some limitations, which we describe in the last section of this report. We considered these limitations in our assessment but, based on the preponderance of the evidence, determined that the applicable standards were generally met.

[7]We assessed those generally accepted standards that were relevant for this type of study.

Table 1: GAO's Assessment of the Extent to Which the Air Force Airlift Study Conformed with Generally Accepted Research Standards

Generally accepted research standards	Comments
Design	The design plan was coordinated with the project's sponsor to ensure that the research was correctly focused and planned. Assumptions and constraints of the plan were identified, and deviations from the plan were mentioned, such as the rationale of selecting one domestic scenario to discuss two missions.
Execution	The execution of the airlift study was consistent with the study plan and schedule. The study utilized sufficiently reliable data—specifically, flight data approved by the study's stakeholders for use in estimating ranges of mission success when utilizing certain amounts of fixed- and rotary-wing aircraft. RAND used these data to conduct Monte Carlo analyses, which are an appropriate analytical tool for modeling risk levels for mission accomplishment given various amounts and types of airlift support.
Presentation	The study's objectives, assessment, and conclusions were well documented and supported by the analysis contained in the study, and the stakeholders were informed of the study's results.

Source: GAO analysis of the Air Force data. | GAO-15-457R

The generally accepted research standards we used to evaluate the airlift study are included in enclosure I.

The Airlift Study Met the Requirements of the Mandate

We found that the airlift study met the requirements of Section 112(d) of the NDAA for Fiscal Year 2012. The mandate required the Secretary of the Air Force, in consultation with the Secretary of the Army, the Director of the National Guard Bureau, each supported combatant commander, and the Administrator of FEMA, to conduct a study to determine the number of fixed-wing and rotary-wing aircraft required to support four specified missions under Titles 10 and 32, U.S. Code—homeland defense, time-sensitive direct support, disaster response, and humanitarian assistance—at five levels of operational risk.[8] Our analysis of the extent to which the RAND study met the requirements of the mandate is summarized in table 2 below.

[8]*See* Pub. L. No. 112-81, § 112(d).

Table 2: Summary of Our Assessment of the Air Force Airlift Study in Response to Section 112 of the National Defense Authorization Act for Fiscal Year 2012

Study requirement	Our assessment of the Air Force study	Comments
(1) Determine the number of fixed-wing and rotary-wing aircraft required to support the following missions (at the various risk levels mentioned below): • Homeland defense • Time-sensitive, direct support to forces consisting of the regular component of the Army and the National Guard • Disaster response • Humanitarian assistance	Addressed	The airlift study analyzed the four missions using four approved scenarios: two overseas scenarios for the time-sensitive, direct support mission; one domestic scenario for the homeland defense mission; and one additional domestic scenario for both the disaster response and humanitarian assistance missions.
(2) Determine the number of fixed-and rotary-wing aircraft required to support the missions at the following operational risk levels: Low, Medium, Moderate, High, Very High	Addressed	Although DOD generally recognizes four levels of risk, to comply with the mandate requirement the risks were modified into five risk levels—very high, high, moderate, medium, and low—in the Air Force study. Each risk level identifies the likelihood of meeting airlift demand with a given deployed fleet size.
(3) Perform the airlift study in consultation with • Secretary of the Army • Director of National Guard Bureau • Each supported commander of a combatant command • Administrator of the Federal Emergency Management Agency (FEMA)	Addressed	The Air Force consulted with officials from the Army, the National Guard Bureau, the combatant commands, and FEMA. We verified participation through written documentation provided from the Air Force and RAND and interviews and correspondence with the stakeholders.

Source: GAO analysis of Air Force data. | GAO-15-457R

Missions and Scenarios

To analyze the four missions specified in Section 112, officials selected a representative scenario of each of the mission areas that portrayed either (1) time-sensitive direct support to combat forces on the ground outside of the continental United States or (2) civil support missions within the continental United States. To analyze the fixed- and rotary-wing airlift requirements for the time-sensitive, direct support mission, officials used two warfighting scenarios that placed various demands on airlift. For the other three missions specified in the provision, officials chose domestic scenarios from a set of 26 approved planning scenarios and

variants that involved a combination of humanitarian assistance, disaster response, and homeland defense.[9] Officials then further organized these domestic scenarios into seven groups—for example, one group considered nuclear attacks, and another considered wide-area casualties and infrastructure damage, including an earthquake and hurricane—and determined the various types of support that would be required for each group. Based on this assessment, officials concluded that wide-area catastrophes, such as a natural disaster or nuclear attack, would be the most demanding events for airlift. Consequently, officials elected two scenarios—a 10-kiloton nuclear terrorist attack in Washington, D.C., and a large (7.7 magnitude) earthquake in the central United States—to analyze the homeland defense, humanitarian assistance, and disaster response missions.

While the same domestic scenario was used for the analysis of both the disaster response and humanitarian assistance missions, according to Army and Air Force officials, as well as officials from FEMA and the National Guard Bureau, humanitarian assistance is generally recognized as assistance provided to other nations**.** Because of this, some stakeholders expressed a preference for using a foreign scenario to conduct the analysis of airlift requirements associated with a humanitarian assistance mission.[10] When asked why the same domestic scenario was used to analyze both the disaster response and humanitarian assistance missions, RAND officials stated that doing so would enable them to analyze airlift requirements in both Title 10 and Title 32 statuses. Moreover, a RAND official stated that tasks generally associated with humanitarian assistance missions would remain the same whether the scenario used to analyze the mission was domestic or foreign. The study's stakeholders agreed that using a domestic scenario to analyze the humanitarian assistance missions was adequate for the purposes of the study.

Requirements per Risk Level

To determine the requirements of fixed- and rotary-wing aircraft for each mission at each of the five risk levels, officials categorized each level by the likelihood of meeting airlift demand with a given deployed fleet size. For the airlift study, RAND interpreted DOD's risk assessment definition of probability to be four levels of risk: (1) high—unlikely (0–20 percent) to meet airlift demand at a given deployed fleet size, (2) significant—questionable (20–50 percent), (3) moderate—likely (50–80 percent), and (4) low—very likely (80–100 percent). However, to comply with the mandate requirement, the risk scale in the study was expanded to include a fifth level between the levels of significant and moderate, and the thresholds were adjusted to (1) high—unlikely (0–20 percent), (2) significant—questionable (20–40 percent), (3) moderate-significant—likely to questionable (40–60 percent), (4) moderate—likely (60–80 percent), and

[9]Doctrinally, response to disasters in the United States homeland may be classified as "defense support of civil authorities." *See generally* Joint Chiefs of Staff, Joint Pub. 3-28, *Defense Support of Civil Authorities* (July 31, 2013). The 26 approved planning scenarios constitute a list developed from the Federal Interagency Community, including DOD and FEMA, for use in national, federal, state, and local homeland-preparedness activities.

[10]Various statutes and DOD guidance similarly discuss humanitarian assistance provided outside the United States. *See, e.g.*, 10 U.S.C. § 401 (providing for humanitarian and civic assistance activities in conjunction with military operations in a foreign country); 10 U.S.C. § 402 (providing for transportation of relief supplies for humanitarian assistance); 10 U.S.C. § 2561 (providing for transportation of humanitarian relief and other humanitarian assistance worldwide); Department of Defense Instruction 2205.02, *Humanitarian and Civic Assistance (HCA) Activities* (June 23, 2014) (implementing 10 U.S.C. § 401); Department of Defense Instruction 3000.05, *Stability Operations* (Sept. 16, 2009) (discussing humanitarian assistance and other missions); Joint Chiefs of Staff, Joint Pub. 3-29, *Foreign Humanitarian Assistance* (Jan. 3, 2014).

(5) low—very likely (80–100 percent) to meet airlift demand at a given deployed fleet size.[11] The study determined the number of generic fixed- and rotary-wing aircraft required to meet the demands of the scenarios listed in the study.

Consultation with Stakeholders

The Air Force consulted with all of the stakeholders listed in the mandate, and most stakeholders concurred with the airlift study. However, some of the stakeholders identified caveats and expressed differing views of the study's analysis and utility. For example, stakeholders noted the study's limited scope and therefore its usefulness for prescribing total airlift requirements; the fact that the study did not address airlift requirements associated with emerging missions; and the specific domestic scenarios selected for analysis. Moreover, although the Air Force supported RAND's analysis, it had a different opinion regarding the requirement for domestic disasters, and adjusted the requirement for fixed-wing assets in domestic disasters in its report accompanying the RAND study. Specifically, RAND had concluded that fixed-wing assets would be difficult to land in unstable areas in disaster zones, and therefore it did not include a requirement for fixed-wing assets in its earthquake scenario. Air Force officials, however, asserted that fixed-wing aircraft flying into landing areas outside the disaster area could be used to bring in equipment that would then be transported by other means to the disaster area. Because of this, the airlift report amended the airlift study's conclusions about the airlift requirements for domestic disaster scenarios by adding a fixed-wing requirement.

The Army, FEMA, and eight of the nine combatant commands concurred with the airlift study, and a few noted caveats in their written comments to the airlift study. U.S. Southern Command and the National Guard Bureau did not concur with the study. Specifically, officials from the Army, U.S. European Command, and U.S. Transportation Command stated that although their respective organizations concurred with the airlift study overall, they questioned the wider utility of the study because it did not consider planning limitations such as multiple simultaneous contingencies, or take into consideration unavailable aircraft (for example, aircraft that are in depots, are used for training, or are used for backup support). Further, officials from U.S. Southern Command did not concur with the study because the study did not address the emerging requirements associated with DOD providing increased support to U.S. diplomatic facilities and personnel overseas. In its written comments, a command official noted that a scenario addressing these emerging airlift requirements should have been considered to address the time-sensitive direct support and disaster relief missions, because it would likely generate a requirement for airlift both into and out of the affected area. Both RAND and the Air Force acknowledged that analysis of such a scenario could be important, but noted that DOD does not currently have a representative scenario for this type of event. Further, Air Force officials stated that when planning for airlift requirements, to maintain transparency and equality, representative scenarios are selected from a preapproved list to which all services have access, and it is not generally acceptable to use scenarios outside of this list for planning.

In addition to U.S. Southern Command, officials from FEMA and the National Guard Bureau raised concerns with the scenarios selected. Specifically, FEMA officials noted that the information RAND used while analyzing the domestic scenarios it selected was not up to date. For instance, FEMA stated that the earthquake scenario did not incorporate lessons learned that FEMA had previously identified. According to a FEMA official, this information was offered

[11]According to the airlift study, risk level probability ranges are rounded. Each range is inclusive of the lower bound shown but not inclusive of the upper bound.

to RAND. However, a RAND official stated that the data used were the most current information made available at the time of the analysis. Similarly, officials from the National Guard Bureau questioned RAND's decision not to use a hurricane scenario to analyze airlift requirements associated with a disaster response mission. According to these officials, a hurricane places stressors on airlift that would not be captured by analyzing earthquakes. As a result, the National Guard Bureau did not concur with RAND's determination that there are sufficient airlift resources to meet requirements.[12] According to RAND officials, they did not choose a large hurricane scenario like Hurricane Katrina primarily because the timing and location of hurricanes can be anticipated, thus allowing for pre-event preparations that would greatly reduce airlift requirements. For example, evacuations in areas in or near a hurricane's anticipated path prior to a hurricane making landfall would reduce the requirement for search and rescue and for medical evacuation airlift. While the Air Force supported RAND's observation that airlift requirements for a hurricane scenario can be predetermined and therefore mitigated, in the airlift report accompanying the study the Air Force still included an assessment of a hurricane scenario because of its potential stressors on airlift.

Agency Comments

We provided a draft of this report to DOD for review and comment. In written comments, which are reprinted in enclosure III, DOD concurred with our findings.

Additionally, we provided a draft of this report to DHS for review and comment. DHS did not have any comments.

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We are sending copies of this report to the appropriate congressional committees, the Secretary of Defense, the Secretaries of the Air Force and Army, the Chief of the National Guard Bureau, and the Administrator of FEMA. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-5431 or russellc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report include Guy LoFaro (Assistant Director), Kim Seay (Assistant Director), Martin De Alteriis, Randy DeLeon, Mike Shaughnessy, Anne Stevens, Cheryl Weissman, and Natasha Wilder.

Cary Russell
Director, Defense Capabilities and Management
Enclosures - 3

[12]During the same period the RAND study was being conducted, the National Guard Bureau conducted an unclassified study—which included a hurricane scenario analysis—that , by contrast, found that the Air National Guard would not be able to meet the anticipated 2017 force structure requirements. National Guard Bureau, *Functional Solutions Analysis for Fixed/Rotary Wing Support to Homeland Defense/Defense Support to Civil Authorities (HD/DSCA) and State-Level Missions* (Nov. 2, 2012).

List of Committees

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The Honorable Rodney Frelinghuysen
Chairman
The Honorable Pete Visclosky
Ranking Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives

Enclosure I: Generally Accepted Research Standards Checklist

We applied the applicable standards derived from relevant GAO work, literature, and guidance that we identified as relevant to the Air Force airlift study, as shown in table 2.

Table 3: GAO Generally Accepted Research Standards Checklist for the Air Force Airlift Study

Design: The study is well designed
I. Study, plan scope, and objectives
I.a Was the study plan followed?
I.b Are the objectives clearly stated?
I.c Were the deviations from the plan explained and documented?
I.d Is the study's scope clearly defined?
II. Assumptions and constraints are reasonable and consistent
II.a Are the assumptions explicitly identified?
II.b Are the study assumptions necessary and reasonable?
II.c Are the major constraints identified and discussed?
II.d Do the study assumptions support a sound analysis?
II.e Are the assumptions used in analyses common throughout the study and models?
II.f Are the assumptions varied to allow for sensitivity analyses?
II.g Do the assumptions contribute to an objective and balanced research effort?
III. Scenarios and threats are reasonable
III.a Are scenarios traceable back to formal guidance?
III.b Do scenarios represent a reasonably complete range of conditions?
III.c Were the threats varied to allow for the conduct of sensitivity analysis?
Execution: The study is well executed
IV. Methodology is successfully executed
IV.a Was the study methodology executed consistently with the (airlift requirements) study plan and schedule?
IV.b Does the methodology support accomplishing the objectives presented in the study plan?
IV.c Were the models used to support the analyses adequate for their intended purpose?
IV.d Were the model input data properly generated to support the methodology?
V. (Analytical) Baseline data and other data used to support study and analyses validated, verified, and approved[a]
V.a Is the (analytical) baseline fully and completely identified and used consistently throughout the study for the various analyses?[a]
V.b Were data limitations identified and was the effect of the limitations fully explained?
V.c Were the baseline data verified and validated?[a]
V.d Was the data verification and validation process documented?
VI. Models, simulations, and verification, validation, and accreditation (VV&A) are reasonable[a]
VI.a Was a VV&A report that addresses the models and data certification included in the report?[a]
VI.b Were modeling and simulation limitations identified and explained?
VI.c Has each model in the study been described?
VI.d Are the model processes clearly explained, documented, and understood?
VII. Measures of effectiveness (MOE) and essential elements of analysis (EEA) are

addressed?[a]
VII.a Do MOEs adhere to the guidance in the study terms of reference?[a]
VII.b Are the MOEs fully addressed in the study?[a]
VII.c Are the EEAs addressed in the study?[a]
Presentation of results: Timely, complete, accurate, concise, and relevant to the client and stakeholders
VIII. Presentation of results supports findings
VIII.a Does the report address the objectives?
VIII.b Does the report present an assessment that is well documented and conclusions that are supported by the analyses?
VIII.c Are the conclusions sound and complete?
VIII.d Are recommendations supported by analyses?[a]
VIII.e Is a realistic range of options provided?
VIII.f Are the study results presented in the report in a clear manner?
VIII.g Are study participants informed of the study results?

Source: GAO. | GAO-15-457R

[a]Denotes components deemed not applicable.

Enclosure II: Scope and Methodology

To determine the extent to which the Air Force airlift study conformed to generally accepted research standards, we identified generally accepted research standards and compared the study to those standards. To identify these standards we reviewed checklists of generally accepted research standards from prior GAO work that also reviewed the Department of Defense (DOD) mobility requirements studies.[13] In addition to reviewing these checklists and other research literature and DOD guidance, we identified frequently occurring, generally accepted research standards that are relevant for defense studies and that define a well-documented and clearly presented study. The checklist we developed categorized the standards into three areas—design, execution, and presentation (see encl. I for a list of the specific standards). Two analysts and two social scientists reviewed the Air Force's classified airlift study that was included in the Air Force's classified airlift executive summary report, the airlift report, and the plan of the study and analyzed the information presented against the identified generally accepted research standards to determine whether the study met the standard.[14] Then the four separate analyses were reconciled to create one complete analysis of the extent to which the study conformed to the identified standards. We clarified any disagreements within the analyses and, in some instances, we determined that some of the standards we identified in our checklist were not applicable to the airlift study.[15] Therefore, we did not measure the study against standards that were not applicable. We also interviewed officials from Air Force Air Mobility Command and RAND to discuss their participation in the study and from Headquarters Air Force to discuss their knowledge of the subject matter.

To determine the extent to which the Air Force's study addressed the requirements of the mandate, two analysts conducted a content analysis to determine the extent to which the airlift study met the requirements in Section 112 of the National Defense Authorization Act for Fiscal Year 2012. We created a checklist of the mandate requirements and compared them with the information contained in the classified Air Force airlift study accompanying the Air Force airlift report. We determined whether the study fully met, partially met, or did not meet the mandate's requirements. We also interviewed pertinent officials within the Air Force, RAND, the Army, the National Guard Bureau, the combatant commands, and the Federal Emergency Management Agency to determine their respective roles and responsibilities in completing the study.

Specifically, during the course of our engagement, we visited or contacted the following organizations:

Department of Defense

- Headquarters Air Force
- Air Mobility Command

[13]GAO, *Defense Transportation: Study Limitations Raise Questions about the Adequacy and Completeness of the Mobility Capabilities Study and Report*, GAO-06- 938 (Washington, D.C.: Sept. 20, 2006); *Defense Transportation: Additional Information Is Needed for DOD's Mobility Capabilities and Requirements Study 2016 to Fully Address All of Its Study Objectives*, GAO-11-82R (Washington, D.C.: Dec. 8, 2010).

[14]RAND uses the term "project description" instead of the term "study plan." Both terms can be used to describe a document showing client-approved project or study timelines and deliverables.

[15]As is the case for most studies, there were some limitations, which we describe in the last section of this report. We considered these limitations in our assessment, but made our determinations based on the preponderance of the evidence for each standard.

- Headquarters, Department of the Army
- National Guard Bureau
- U.S. Northern Command
- U.S. European Command
- U.S. Southern Command
- U.S. Africa Command
- U.S. Central Command
- U.S. Pacific Command
- U.S. Transportation Command
- U.S. Special Operations Command
- U.S. Strategic Command

Department of Homeland Security

- Federal Emergency Management Agency

RAND Corporation

We conducted this performance audit from June 2014 to May 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Enclosure III: Comments from the Department of Defense

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC

May 11, 2015

Mr. Cary Russell
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, NW
Washington DC 20548

Dear Mr. Russell:

This is the Department of Defense (DoD) response to the GAO Draft Report GAO-15-457R, "DEFENSE TRANSPORTATION: Air Force's Airlift Study Met Mandate Requirements," dated April 17, 2015 (GAO Code 351938).

The Department concurs as written and appreciates the opportunity to comment on the draft report.

Sincerely,

WILLIAM L. TROY III, GS-15, DAFC
Technical Director, Force Structure Analyses
Headquarters Air Force

(351938)

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